#### CRUISE REPORT

**VESSEL:** Townsend Cromwell, Cruise 91-05 (TC-163)

CRUISE

PERIOD: July 26-August 2, 1991

AREA OF

**OPERATION:** Northwestern Hawaiian Islands (NWHI) (Fig. 1)

TYPE OF

**OPERATION:** Marine Mammal Endangered Species Program (MMESP)

and U.S. Fish and Wildlife Service (USFWS)

equipment and supplies were transported to French Frigate Shoals (FFS). USFWS personnel, supplies, and gear were transported to Laysan Island. In addition to embarking (MMESP) and USFWS personnel,

(MMESP) equipment was also removed from Laysan

Island. (MMESP) personnel, a cooperating scientist, equipment, and supplies were transported to Pearl and Hermes Reef. All

personnel and equipment retrieved from the NWHI were transported to and off-loaded at Midway

Island.

#### ITINERARY:

July 26 - Departed Snug Harbor, Honolulu for FFS. On board Richard A. Bauer, LT(jg) Michele A. Finn, Vanessa Gauger, John R. Henderson, and Robert A. Rydell.

July 28 - Arrived FFS at 1215. Off-loaded equipment and supplies. Departed FFS at 1545 and proceeded to Laysan Island.

July 30 - Arrived Laysan Island at 0800. Off-loaded USFWS equipment and disembarked Robert A. Rydell. Onloaded (MMESP) equipment and supplies and embarked Brenda L. Becker, Leona P. Laniawe, Kristen E. O'Brien, and Craig Rowland. En route to Lisianski Island at 1130.

July 31 - Arrived Lisianski Island at 0800. On-loaded all (MMESP) equipment and supplies. Embarked William

G. Gilmartin and M. Casey Jarman. En route to Pearl and Hermes Reef at 1115.

August 1 - Arrived Pearl and Hermes Reef at 0800. Off-loaded (MMESP) equipment and supplies. Commenced the establishment of field camps on Southeast and North Islands. Disembarked Richard A. Bauer, Michele A. Finn, Vanessa Gauger, John R. Henderson, and Leona P. Laniawe. En route to Midway Island at 1900.

#### MISSION AND RESULTS:

A. Provide logistical support for (MMESP) and USFWS field camps at FFS and for the USFWS field camp at Laysan Island.

The field equipment and supplies were off-loaded at Tern Island, FFS, and Laysan Island.

B. Retrieve (MMESP) field equipment and personnel from Laysan Island and Lisianski Island.

The (MMESP) and USFWS personnel were embarked and equipment and supplies on-loaded at Laysan Island and Lisianski Island. One USFWS person was disembarked at Laysan Island.

C. Transport (MMESP) field equipment, supplies and personnel to Pearl and Hermes Reef. Provide logistical support for the established (MMESP) field camps.

The (MMESP) and University of Hawaii personnel were disembarked and equipment and supplies were off-loaded at Southeast Island, Pearl and Hermes Reef.

- D. General observations and miscellaneous activities.
  - 1. Bird flock, fish school, and marine mammal sightings were recorded by the ship's officers and crew during daylight hours when possible.
  - 2. Standard weather observations were made at 0000, 0600, 1200, and 1800 (G.m.t.) by the ship's officers and crew.
  - 3. Four XBT casts were made daily at 0500, 1100, 1700, and 2300 (G.m.t.) as part of the SEAS project.

# SCIENTIFIC PERSONNEL:

## July 26-August 1, 1991

Michele A. Finn, Chief Scientist, National Marine Fisheries Service (NMFS), Southwest Fisheries Science Center (SWFSC), Honolulu Laboratory (HL) John R. Henderson, Fishery Biologist, NMFS, SWFSC, HL Richard Bauer, Research Assistant, NMFS, SWFSC, HL Vanessa Gauger, Cooperating Scientist, University of Hawaii (UH)

## July 26-July 30, 1991

Robert A. Rydell, Cooperating Scientist, U.S. Fish and Wildlife Service (USFWS), HL

## July 30-August 2, 1991

Brenda L. Becker, Wildlife Biologist, NMFS, SWFSC, HL Kristen E. O'Brien, Research Assistant, NMFS, SWFSC, HL Craig Rowland, Cooperating Scientist, USFWS, HL

## July 31-August 2, 1991

William G. Gilmartin, Wildlife Biologist, NMFS, SWFSC, HL M. Casey Jarman, Research Assistant, NMFS, SWFSC, HL

#### July 30-August 1, 1991

Leona P. Laniawe, Research Assistant, NMFS, SWFSC, HL

Submitted by:

Michele A. Finn LT(jg)/NOAA
Chief Scientist

Approved by:

George W. Boehlert

Director, Honolulu Laboratory

Attachment